J750 Test System Probe Purge Solution Kit Installation Manual

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Revision: 0240

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About This Document

This manual describes how to install the J750 Probe Purge Solution Kit (Teradyne Part Number, IT-901-13) to the customer's Probe Interface Board (PIB). All instructions assume that both the J750 tester and the prober are installed and fully operational.

This manual is intended for trained maintenance personnel. The local Teradyne Service office can assist with any additional questions you may have about the J750 Test System or this kit.

We welcome any comments or feedback you have about this manual, the purge kit or the J750 Test System. Please send feedback to: J750Support@teradyne.com.

For your convenience, we have also included a Manual Comment Form at the end of this document.

Viewing This Document Online

When viewing this document online, you may *click* any hyperlink, cross-reference or page number to jump to that topic.

Additional Documentation

The following documents may provide additional information when using this document:

- J750 - 512 Pin Test System Service Reference Manual, Teradyne Document Number 552-360-33
- J750 - 1024 Pin Test System Service Reference Manual, Teradyne Document Number 552-360-34

Revision History

Revision Number	Description of Revision
0240	Initial Release

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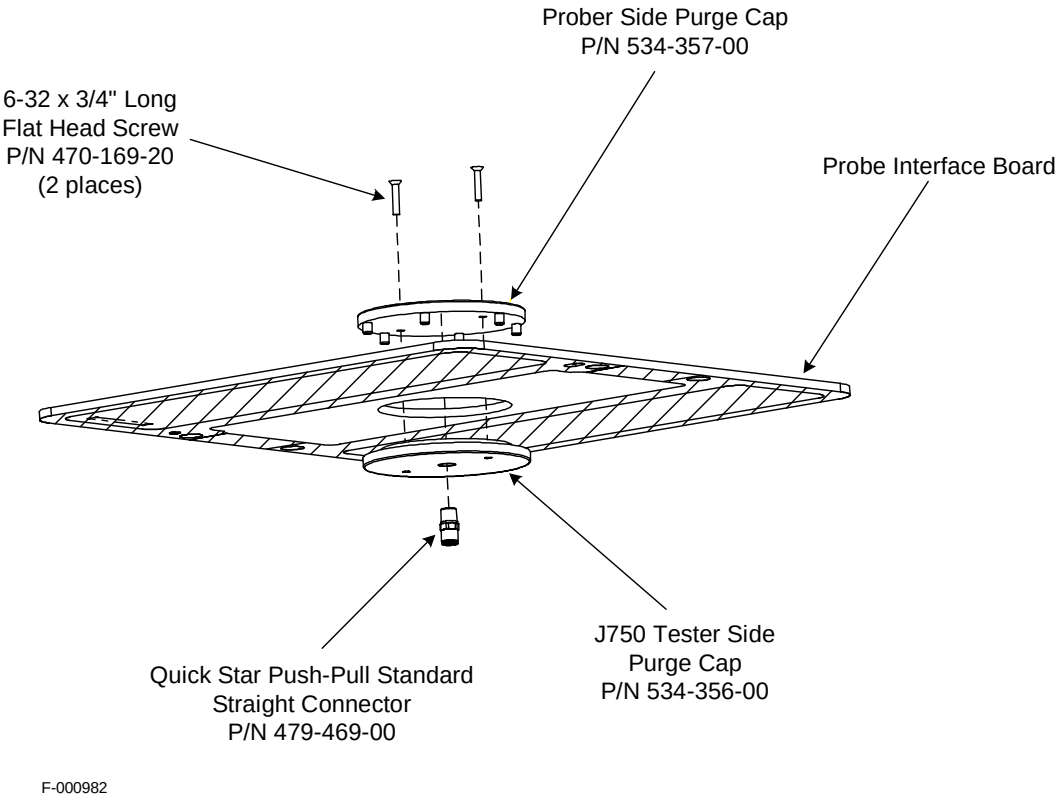
Overview

The J750 Probe Purge Solution Kit comes ready to assemble to the customer's Probe Interface Board (PIB). The kit consists of:

- J750 Tester Side Purge Cap
- Prober Side Purge Cap
- Quick Star Push-Pull Standard Straight Connector
- Quick Star Push-Pull L-Connector
- 6mm tubing , 22" long
- 6-32 x ¾ long flat head screws, quantity 2

Installation of the kit helps reduce condensation build up on the PIB when wafer testing is being performed while the prober is running at cold temperatures.

Figure 1 shows a drawing of the kit components as assembled to the PIB.



Note: 6mm tubing not shown.

Figure 1: J750 Probe Purge Solution Kit

Installation

Overview

The ***Installation*** section provides information and procedures for the following:

- Unpacking the Probe Purge Solution Kit
- Installing the Probe Purge Solution Kit

Unpacking the Probe Purge Solution Kit

The kit is shipped in a single carton. Prior to starting installation, open the carton and ensure that the following items are present:

- J750 Tester Side Purge Cap (Teradyne Part Number 534-356-00)
- Prober Side Purge Cap (Teradyne Part Number 534-357-00)
- Quick Star Push-Pull Standard Straight Connector (Teradyne Part Number 479-469-00)
- Quick Star Push-Pull L-Connector (Teradyne Part Number 479-479-00)
- 6mm tubing , 22” long (Teradyne Part Number 479-018-02)
- 6-32 x ¾ long flat head screws, quantity 2 (Teradyne Part Number 470-169-20)

Installing the Probe Purge Solution Kit

This section of the manual describes the procedures for installing the J750 Probe Purge Solution Kit to the PIB.

Note: These instructions assume that both the tester and prober are installed and are fully operational. Do not attempt to install the kit if this is not the case.

The following tools are required to install the kit:

- No. 2 phillips screwdriver
- 12mm open-end wrench
- 5/64” hex wrench

Perform the following steps to install the kit to the PIB:

Preparing the Tester

Prior to installing the J750 Probe Purge Solution Kit, the J750 tester must be prepared as follows:

Caution: Always wear a tested grounding strap while working on the J750 tester.

1. Ensure that the tester is fully undocked and a sufficient distance from the mating equipment.

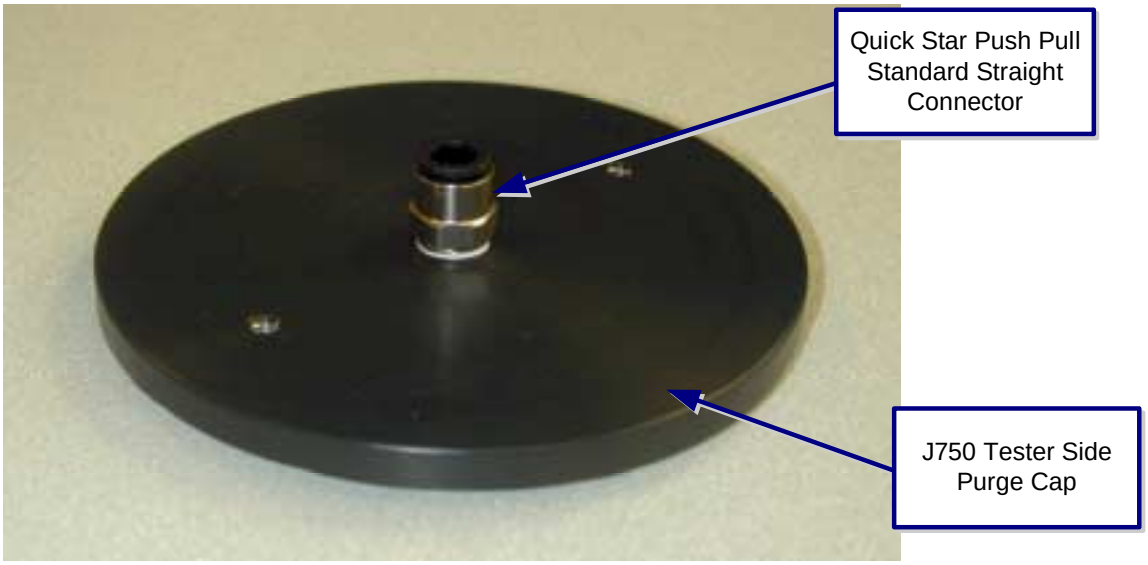
2. Position the tester so that the DIB mounting surface faces up.

Caution: Always ground the Customer PIB when installing or removing it from the DIB fixture on the tester.

3. Properly ground the Customer PIB as outlined in the ***Grounding Calibration and Customer DIBs*** section of the ***Maintenance*** chapter of the ***J750 - 512 Pin Test System Service Reference Manual*** or the ***J750 - 1024 Pin Test System Service Reference Manual***, as appropriate.
4. Push the red Power Off switch on the front of the J750 tester to turn off power.
5. Place the DIB vacuum switch on the tester to the **UNLOCK** (off) position.
6. Remove the Customer PIB from the tester, then remove the ground connection. Place the PIB onto a proper work surface.
7. Remove the six (6) 8-32 x 3/8" long phillips head screws from the DIB cover using the no. 2 phillips screwdriver then remove the cover from the tester.

Installing the Probe Purge Kit

1. Screw the Quick Star Push Pull Standard Straight Connector into the J750 Tester Side Purge Cap. Tighten the connector finger tight then turn it an additional half-turn using the 12mm open-end wrench. Figure 2 shows the connector assembled to the cap.



F-000986

Figure 2: J750 probe purge kit assembly

2. Assemble the two (2) Purge Caps to the Probe Interface Board (PIB) and secure using the two (2) 6-32 x ¾ long flat head screws provided with the kit. Tighten the screws using the 5/64" hex wrench for this purpose. Figure 3 shows the caps assembled to the PIB.

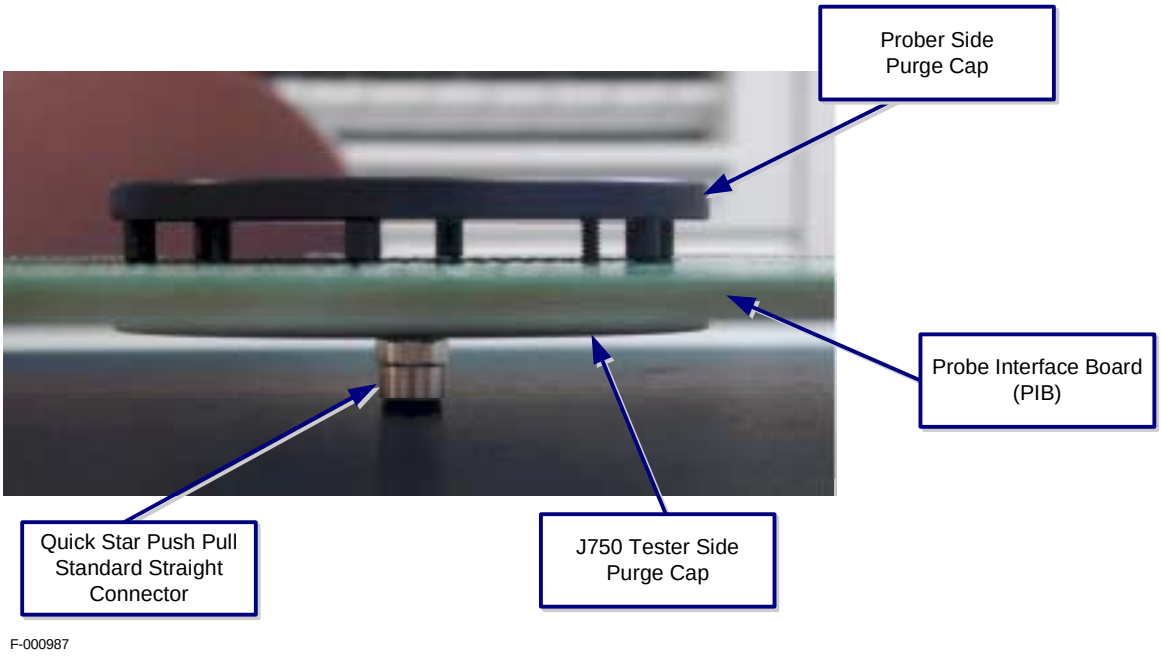


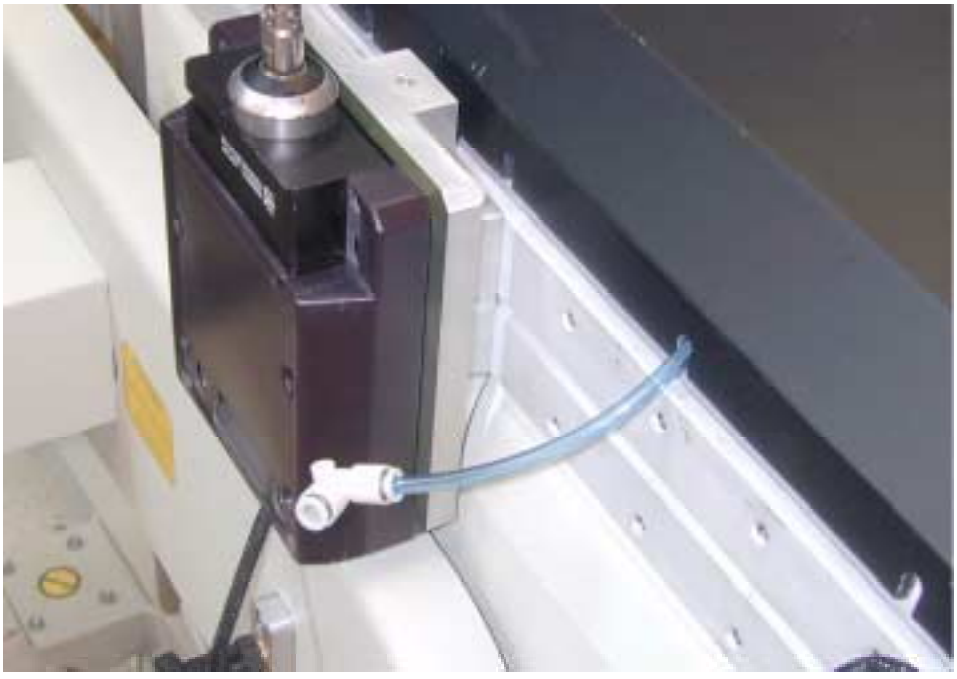
Figure 3: Purge caps assembled to PIB

3. Assemble the Quick Star Push-Pull L-Connector (Teradyne Part Number 479-479-00) from the kit onto the free end of the 6mm piece of tubing.
4. Lay the piece of tubing on top of the tester so that the end with the connector hangs over the side of the tester and the other end of the tubing is in the center of the Air Flow Shield. Figure 4 shows the tubing on the tester.

F-000988

Figure 4: 6mm tubing on the tester

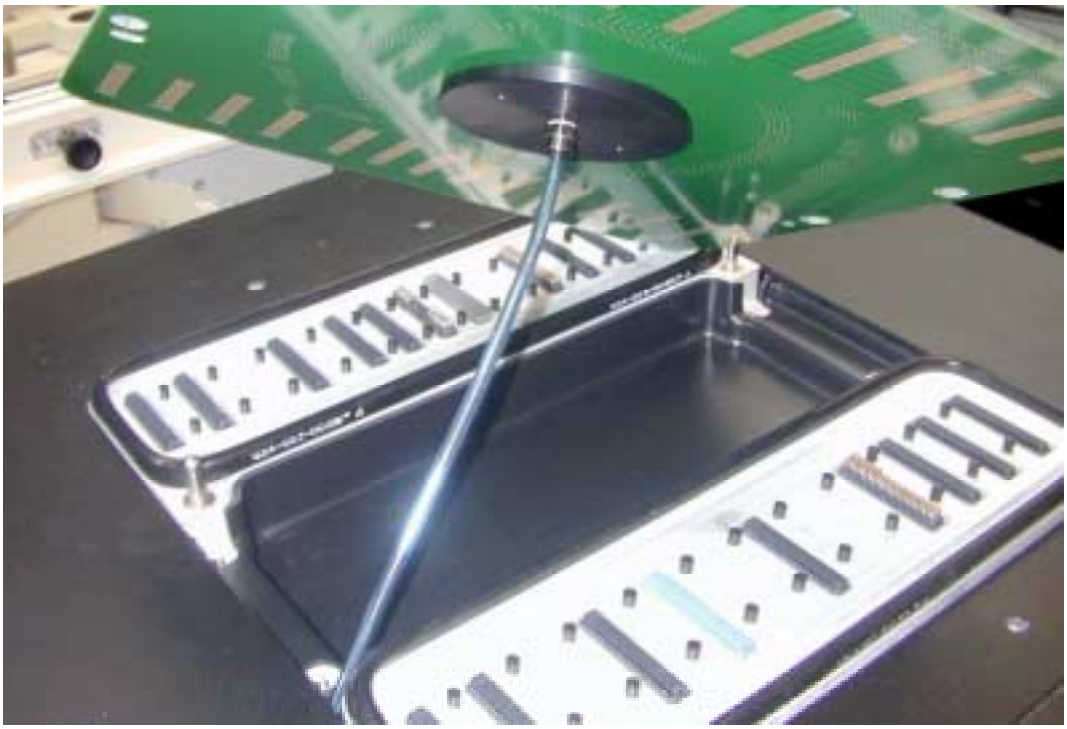
5. Replace the DIB cover onto the tester so that the tubing fits under one of the notches in the cover and secure using the six (6) 8-32 x 3/8" long phillips head screws previously removed. Tighten the screws using the no. 2 phillips screwdriver. Figure 5 shows the tubing properly positioned under the cover.



F-000989

Figure 5: Tubing under DIB cover

6. Connect the piece of 6mm tubing (Teradyne Part Number 479-018-02) from the kit into the end of the Quick Star Push Pull Standard Straight Connector. Figure 6 shows the tubing connected to the connector.



F-000990

Figure 6: Tubing connected to quick star straight connector

7. Mount the PIB onto the DIB fixture of the tester then connect a 6mm air supply tube from the prober to the end of the L-Connector.

   The J750 Probe Purge Solution Kit is now fully assembled and ready for use

Note: Ensure that the pressure of the air supply flowing through the Purge solution does not exceed 30 psi. Standard operating pressure for the Probe Purge Solution Kit is 25-30 psi.

Reference Information

Bill of Materials (BOM)

Item Number	Part Number	Description	Quantity
-	**IT-901-13**	**J750 Probe Purge Solution Kit**	**-**
1	535-356-00	- J750 Tester Side Purge Cap	1
2	534-357-00	- Prober Side Purge Cap	1
3	479-469-00	- Quick Star Push-Pull Standard Straight Connector	1
4	479-479-00	- Quick Star Push-Pull L-Connector	1
5	479-018-02	- 6mm tubing , 22” long	1
6	470-169-20	- Screw, flat socket head, no. 6-32 x 3/4 inch long	2

Assembly Drawings

The ***Assembly Dra*wing** section of this manual provides the following drawings:

- N/A

Personal Notes

Manual Comment Form

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2. How do you use this manual?
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3. When you need to find information in this manual, where is the first place that you look:
   __ Table of Contents
   __ Thumb through the pages until I find what I am looking for

4. How easily can you find information in this manual?

   1 2 3 4 5

   Not easily Very easy

5. How clear is the information in this manual?

   1 2 3 4 5

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(continued on next page)

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Return to:

Teradyne, Inc.
9 Crosby Drive
Bedford, MA 01730-1401
USA
Attn: Product Support Department

FAX: (781) 275-2824

Email: ITD-PSG@teradyne.com